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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,167	01/09/2004	Scott R. Watterson	13914.877	7517

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EXAMINER

NGUYEN, TAM M

ART UNIT PAPER NUMBER

3764

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/754,167

Applicant(s)

WATTERSON ET AL.

Examiner

Tam Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-37 and 40 is/are rejected.
- 7) ☒ Claim(s) 38,39 and 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
JEROME DONNELLY  
JEROME DONNELLY  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6-28-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "hall effect sensor" disclosed in claim 8, the various "sensors" disclosed in claims 19-25, "first and second rollers" disclosed in claim 10 and the various "adjustment mechanisms" disclosed in claim 27 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: on page 13, in paragraph [035], the "height adjustment motor 31". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

On Page 5, in paragraph [039] is the phrase "height adjustable motor 382". It appears that the reference number should be restated as --282-- to correspond with Figure 3.

On Page 19, in line 3 of paragraph [047] is the phrase "is than ascertained". It should be restated as --is then ascertained--

On Page 29, in paragraph [069] is the term "controller 101". It appears that the reference number should be restated as --104-- to correspond with Figure 10.

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On Page 29, in paragraph [069] is the term "selection pad 100". It appears that the reference number should be restated as --102-- to correspond with Figure 10.

Appropriate correction is required.

### ***Claim Objections***

4. Claim 13 objected to because of the following informalities:

In claim 13, on line 5, the semi-colon punctuation mark at the end of the claim should be replaced by a period.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4, 9 and 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4 and 9 recite the limitation "the user" in lines 1 and 3 respectively. Claims 15 and 16 each recite the limitation "the sensor" and "the cushioning mechanism". Claims 19-25 each recite the limitation "the sensor".

There is insufficient antecedent basis for these limitations in their respective claims. It appears that claims 15, 16 and 19-25 should depend on claim 13 for proper antecedent basis since claim 13 discloses "the sensor" and "the cushioning mechanism". Examiner will make this assumption to expedite the prosecution.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shafer et al. (6,045,490).

6. As to claims 1-4 and 9-12, Shafer et al. disclose a cushioned treadmill comprising a treadbase having a deck (303) that moves when an exerciser exercises on the treadbase and a self-adjusting cushioning assembly (305) configured to provide cushioning to movement of the deck and adjust the amount of cushioning to movement of the deck wherein the self-adjusting assembly automatically adjust when a user steps on the treadbase and when a user having a different weight from the previous user steps on the treadbase, and a user can select the amount of cushioning to be provided by the self-adjusting cushioning assembly (see Figs. 1, 2, 3a, 3b & Col. 6, line 45- Col. 7, line 24). Shafer et al. also disclose that the treadbase further comprises first and second rollers (301,302), an endless belt (2) and a treadbase frame (200) wherein the deck is coupled at one end to the treadbase and moves with respect to the treadbase frame when a user exercises on the treadbase frame (see Figs. 2 & 3).

Claims 1-6, 9 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by Wang et al. (6,953,419).

7. As to claims 1-6, 9 and 10, Wang et al. disclose a cushioned treadmill comprising a frame (20), a treadbase having an endless belt (31) inherently trained about first and second rollers, a deck (30) that moves when an exerciser exercises on the treadbase, a self-adjusting cushioning assembly (51) configured to provide cushioning to movement of the deck and adjust the amount of cushioning to movement of the deck and a deflection sensor assembly (25, 26, 27) for adjusting the amount of cushioning provided by the self-adjusting cushioning assembly wherein the self-adjusting assembly automatically adjust when a user steps on the treadbase and when a user having a different weight from the previous user steps on the treadbase, and a user can select the amount of cushioning to be provided by the self-adjusting cushioning assembly (see Figs. 1-4 & Col. 2, line 50 - Col. 3, line 48). Shafer et al. also disclose that the treadbase further comprises first and second rollers (301,302), an endless belt (2) and a treadbase frame (200) wherein the deck is coupled at one end to the treadbase and moves with respect to the treadbase frame when a user exercises on the treadbase frame (see Figs. 2 & 3).

Claims 11, 13-18 and 28-34 are rejected under 35 U.S.C. 102(a) as being anticipated by Wang et al. (6,953,419).

8. As to claims 11, 13-18 and 28, Wang et al. disclose a cushioned treadmill comprising a frame (20, 21), a deck (30) mounted on the frame, a self adjusting cushioning assembly configured to provide cushioning movement to the deck with respect to the frame and to automatically adjust the amount of cushioning provided to the movement of the deck (see Figs. 1-4 & Col. 2, line 50 - Col. 3, line 48). Wang

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further discloses that the cushioning assembly comprises a cushioning mechanism (50-52) positioned between the deck and the frame and a sensing assembly (26,27) configured to sense deflection of the deck (see Fig. 3) wherein the cushioning assembly further comprises a controller electrically coupled to the cushioning mechanism and the sensing assembly such that the amount of cushioning is adjusted in light of deck deflection feedback or is adjusted by a user to a personally suitable value that broadly encompasses various levels such as hard, medium or soft (see Col. 3, lines 20-48).

9. As to claims 29-34, Wang et al. disclose a cushioned treadmill as described above (see discussion of claim 28). Wang also discloses that a user sets the staged difference; and the cushioning mechanism, the sensor and the control program work to supply a self-set stable supporting force; thus the controller, electrically coupled to the sensor and cushioning member, adjusts the cushioning mechanism relative to an initially set deflection measurement (see Col. 3, lines 42-48).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 35-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,953,419) in view of Saunders et al. (7,026,946).

10. As to claims 7 and 8, Wang discloses a cushioned treadmill as described above (see discussion of claims 1 and 34 respectively). Wang does not disclose that the



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deflection sensor assembly includes a Hall effect sensor that can ascertain the weight of the user. Saunders et al. disclose a deflection sensor assembly (108, 112-114) that includes a Hall effect sensor that can ascertain the weight of a user (see ABSTRACT, Col. 4, lines 11-37 & Figs. 1 and 2). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to substitute Wang's deflection sensor assembly with Saunder's deflection assembly since Saunder's assembly is functionally equivalent to Wang's sensor assembly in determining deflection and Saunder's sensors also provide the weight of the user which can be utilized to configure exercise routines and recommend optimal exercise parameters.

11. As to claims 35-37 and 40, Wang and Saunders disclose a modified cushioned treadmill as described above (see discussion of claim 34). The modified treadmill would inherently provide a coarse weight reading based on the deflection of the deck when a user steps on the deck wherein the pre-adjustment setting provides an amount of cushioning within a range.

Claims 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,953,419).

12. As to claims 19-27, Wang discloses a cushioned treadmill as described above (see discussion of claim 13). Wang further discloses a sensor (26,27) for detecting the deflection of the treadboard during exercise but Wang does not disclose the specific sensors as disclosed in claims 19-25. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use any of an array of sensors including those disclosed in claims 19-25 since they are functionally equivalent to Wang's sensor

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in transmitting deflection values to the controller to adjust the cushioning mechanism.

Wang also discloses that the cushioning assembly includes a hydraulic cylinder adjustment mechanism (see Col. 3, lines 20-48).

***Allowable Subject Matter***

13. Claims 38, 39 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reyes et al. '542 discloses a treadmill that includes a weight measurement system.

Jensen et al. '155, Moore et al. '913, Whan-Tong et al. '513, Wang et al. '669,

Gureghian et al. '358, and Dunham '831 each disclose treadmills having adjustable dampeners or cushions.

Skowronski et al. '746 disclose a treadmill having sensors for detecting deck deflection.

Aoki '543 discloses a sensor capable of converting a weight into an electrical signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam Nguyen whose telephone number is 571-272-4979.

The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 27, 2006

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JEROME DONNELLY  
PRIMARY EXAMINER

